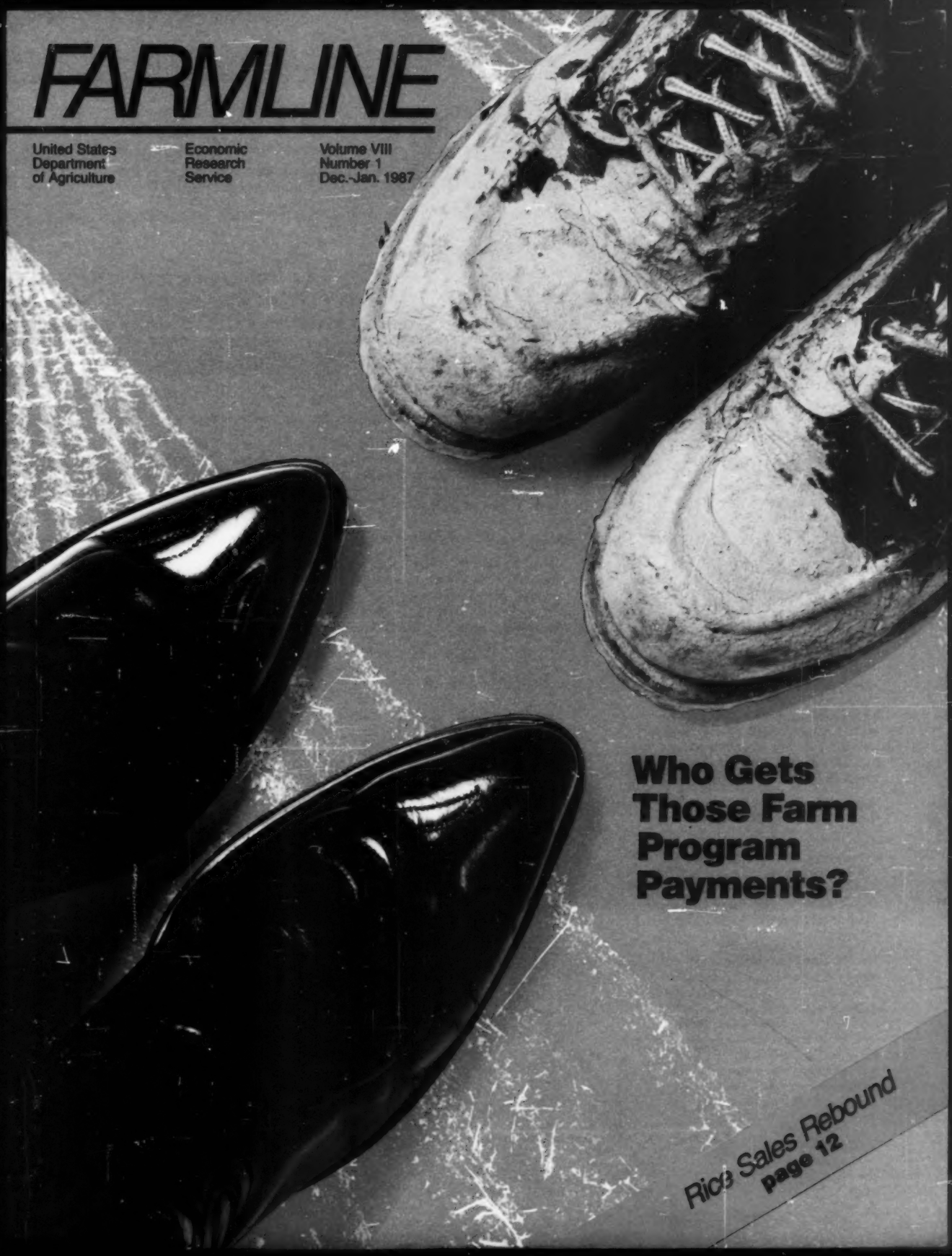
FARMLINE

United States Department of Agriculture

Economic Research Service

Volume VIII
Number 1
Dec.-Jan. 1987



Who Gets Those Farm Program Payments?

Rice Sales Rebound
page 12

FARMLINE

AGRICULTURE . . . NATURAL RESOURCES . . . RURAL DEVELOPMENT
Practical economic intelligence from USDA's Economic Research Service

Editor
Eric Van Chantfort

Assistant Editors
Doug Martinez
Mark Brohan

Editorial Assistant
Martha R. Evans

(202) 786-1494

Contents of this magazine may be reprinted without permission.

FARMLINE is published 11 times a year by USDA's Economic Research Service. Send questions, requests, and editorial comments to *FARMLINE*, Room 228 USDA, 1301 New York Avenue N.W., Washington, D.C. 20005-4788.

Subscription price is $14 to U.S. addresses ($17.50 foreign). Order from: ERS Publications, Rm. 228 USDA, 1301 New York Ave. N.W., Washington, D.C. 20005-4788. Ask for *FARMLINE* magazine and make your check or money order payable to USDA/ERS. Include your complete address, with zip code, and your daytime telephone number. Refunds cannot be issued. Foreign customers note: Only checks drawn on U.S. banks, cashier's checks, or international money orders can be accepted.

Please include your mailing label with change-of-address and other requests related to your subscription.

Subscriptions are also available from the U.S. Government Printing Office for $24 ($30 foreign). For information, write: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

The Secretary of Agriculture has determined that publication of this periodical is necessary in the transaction of public business required by law of this Department. Use of funds for printing *FARMLINE* has been approved by the Office of Management and Budget. Use of commercial or trade names does not imply approval or endorsement by USDA.

FEATURES

Who Gets Those Farm Program Payments? *by Eric Van Chantfort* 3

Everyone has heard about large, profitable farms that receive big government payments. There's no doubt it happens. The commodity programs were not designed to discriminate among producers based on size or profitability. But don't jump to conclusions that payments go mainly to farms without any financial problems, or that most of the outlays go to the biggest farms.

Agriculture's Financial Profile: A Look Behind the Aggregates *by Dave Banker* 6

Economist Dave Banker first reviews the broad measures of the farm sector's recent financial performance and the mixed signals they seem to present. Then he looks behind those aggregates for clues to how widely agriculture's financial strengths and weaknesses are distributed, who's hurting and who's not, and where the numbers seem to be pointing.

Why "Nontariff Barriers" Are a Major Farm Trade Issue *by Doug Martinez* 10

Many nations use tariffs to block imports, but "nontariff barriers" may be an even greater obstacle to expanded world farm trade. In GATT negotiations, U.S. officials are hoping to curb these wide-ranging and widely used protectionist measures.

In Rice's Big Comeback, the Difference Is Price *by Mark Brohan* 12

Declining exports, relatively stagnant domestic demand, and mounting stocks have turned into sharply rising exports, new rice dishes for the domestic menu, and a significant drop in stocks. Price has made all the difference in the rice demand picture.

DEPARTMENT

Farmline Trends: Monthly Price Monitor 15

SPECIAL IN THIS ISSUE

Charting the Outlook: Farm Sector Expenditures and Income 8

The charts carry the message of where we've been, where we are, and where we may be headed this year in a graphic look at some revealing trends in farm sector expenses and income.

Who Gets Those Farm Program Payments?

Everyone has heard about large farms getting large government payments. Many of the farms in these well-publicized cases may also be in generally good financial condition, leading some to conclude that the bulk of government payments go to large farms that don't really need them.

It is this latter conclusion that is not supported by hard data, according to economists Jim Johnson and Dave Banker of USDA's Economic Research Service.

"We know that larger shares of commodity program payments go to certain types and sizes of farms, regardless of financial condition. We know there are some large, profitable farms out there that receive large payments based on production volume or the number of acres taken out of production. We know, as well, that not every farmer in serious financial stress is producing a commodity that qualifies for these program payments," says Johnson.

"However, our data show that nearly 85 percent of 1985 government payments and crop loans went to farms with sales of less than $500,000. The data also indicate that nearly 60 percent of total payments went to farms with high debt loads, negative cash flows, or both."

Johnson and Banker are part of a group of ERS economists who monitor key economic indicators in agriculture, such as farm income and expenses, and farm assets and debts. The primary job of these economists is to analyze and interpret data, as they recently did with the *1985 Farm Costs and Returns Survey.*

The survey, taken in early 1986, provided in-depth financial information on a sample representing 1.6 million farms. This covers 70 percent of the nation's farms and 90 percent of all farms with annual sales over $10,000. The survey (described further on page 7 of this issue) also offers detailed answers on where the money goes when the U.S. government distributes billions of dollars to farmers in direct payments and nonrecourse crop loans under current commodity programs.

Of the 1.6 million farms covered by the survey, 35 percent received government outlays totaling about $13 billion in 1985. The average amount was $24,000 per recipient. Outlays include direct government commodity program payments and net CCC loans (new Commodity Credit Corporation loans minus CCC loans repaid).

Relating to Debt and Cash Flow

For a close look at the financial status of those receiving the payments and loans, Johnson, Banker, and their colleagues compared the payments data with information on each farmer's debt load and cash flow position. If debt amounted to more than 40 percent of the total value of the farmer's assets, the farmer was considered to be in a "high debt" situation. Otherwise, the farmer was put in the "low debt" category. Farmers were classified as having a negative cash flow if their expenses (including household expenses) exceeded their total farm and off-farm income.

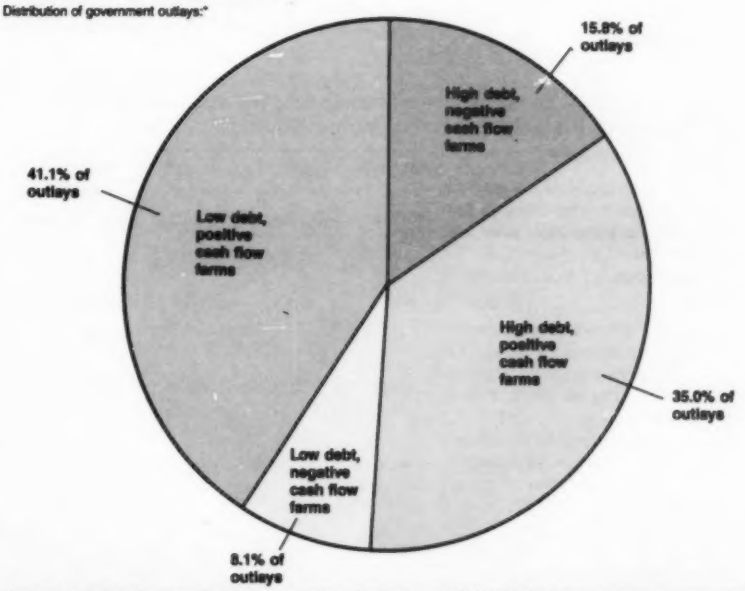
Here is what the survey revealed:

- The 173,000 farms in the most precarious financial position—those with both a high debt and a negative cash flow—accounted for 11.2 percent of all farms represented in the survey. Farms in this category received more than $2 billion in government outlays in 1985. The amount was 15.8 percent of the $13 billion in total government outlays estimated to have been received by farm operators covered in the survey. Of course, payments did not go to all farms in this group. Payments actually went to 53 percent of them, with an average payment of about $22,000 per recipient.

- The nearly 680,000 farms showing only one of the two major signs of financial stress—either a high debt or a negative cash flow—made up around 44 percent of the farms and received 43 percent of the government outlays. Most of these outlays, however, were distributed among a subgroup of 158,000 farms in a high debt (but positive cash flow) position. Fifty-eight per-

Nearly 60% of Outlays Went to Farms with High Debts, Negative Cash Flows, or Both

Distribution of government outlays:*


15.8% of outlays
High debt, negative cash flow farms
41.1% of outlays
Low debt, positive cash flow farms
High debt, positive cash flow farms
35.0% of outlays
Low debt, negative cash flow farms
8.1% of outlays

* Data from *1985 Farm Costs and Returns Survey* covering 1.6 million farms and $13 billion in direct government program payments and net CCC loans.

cent in this latter category received a payment, and they averaged $50,000 per recipient. Only an estimated 30 percent of farms in the other, larger group—low debt but negative cash flow—received some payment in 1985. The average amount was $11,000.

- The remaining farms—slightly more than 700,000 with low debts and positive cash flows—did not show either of the two signs of financial stress. They made up 45 percent of the farms and received 41.1 percent of the payments. Payments went to 31 percent of these farms, with an average payment of $21,000 per farm.

What Does It All Mean?

Johnson and Banker offer a number of observations on this data.

First, nearly 60 percent of the government outlays went to farmers with either high debts, negative cash flows, or both. Fifty-one percent of outlays went to farmers with high debts alone, even though only 21 percent of all farmers were in this group. Finally, nearly 16 percent of total outlays were distributed to those with both debt and cash flow difficulties—a group that accounted for just 11.2 percent of the farms.

But, if some of the facts speak well for the distribution of government payments, others do raise questions.

Why, for example, did outlays go to just half the farms in the financially stressed high-debt, negative cash flow category?

One reason, says Banker, is that these payment and loan programs cover specific crops. "Although many highly stressed farms did get some help, many were not reached by commodity programs, probably because they do not produce program commodities."

And why did 41 percent of commodity program payments and net CCC loans go to farms with no apparent signs of financial stress?

The answer is twofold. The first and most important reason, according to Johnson and Banker, is that eligibility for current programs is not based on financial need.

"A second reason," adds Johnson, "is that preliminary analysis of our data shows that many positive cash flow farms would likely have been in a negative position without government payments and CCC loans. Of course, we don't know what would have happened to these farmers if they had chosen not to participate in the programs, but we can assume that participation offered the highest expected net income."

Those Who Didn't Show Any Need

All these figures still leave a significant number of low-debt farms that would retain their positive cash flows without payments or loans. What about them?

"This is a mixed group," says Banker, "and there's no doubt it includes farms with high incomes and relatively low debt burdens."

While Johnson and Banker recognize that these are the very cases that often raise legitimate questions about the distribution of payments, they also point to the broader perspective.

"The evidence suggests that, generally speaking, it is not true that payments were going to those who needed them least," Banker says. "The majority of payments and loans received by farmers represented in our survey were going to high-debt farms, and a large proportion of these farms were either suffering a negative cash flow or might have faced a negative cash flow without the payments. That majority widens still further when you add in the farms with low debt but negative cash flows."

On the other hand, Johnson and Banker readily acknowledge that the commodity programs can't do everything that is expected of them. They were not designed to discriminate among producers based on finances, so those receiving payments display a wide range of financial situations—from technical insolvency to high profits and low debt.

"The payments are based on production and acreage of specific commodities. Given the design of the programs and the way payments are determined, we can't expect payments to reach all of those in greatest need and bypass those who may be able to earn a profit without them," Johnson says. □

[Based on information provided by economist Jim Johnson, branch chief, and economist Dave Banker of the Economic Indicators Branch of the National Economics Division, Economic Research Service.]

The Two High-Debt Farm Groupings Recorded the Highest Average Outlays and the Largest Percentage of Farms Receiving Outlays[1]

	Number of farms	Percent of all farms	Percent receiving outlays	Percent of total outlays	Average outlay received
High debt, negative cash flow farms	173,000	11.2	53.3	15.8	$22,000
High debt, positive cash flow farms	158,000	10.2	58.2	35.0	$50,000
Low debt, negative cash flow farms	519,000	33.5	30.0	8.1	$11,000
Low debt, positive cash flow farms	701,000	45.1	31.0	41.1	$21,000

[1] Data from *1985 Farm Costs and Returns Survey*. Outlays include direct government commodity program payments and net CCC loans.

There is no denying that some very large, profitable farms receive government payments and loans, but the typical recipient does not fit this stereotype.

Big Checks to Some Big Farms, But Midsize Farms Benefit Most

"There is no denying that some large farms receive large government payments," says Economic Research Service economist Jim Johnson.

"But that is to be expected," he explains. "Many commodity programs are based on decisions by farmers to voluntarily participate and follow the guidelines established for the programs, including removing land from production. Under a paid diversion program, for example, payments are based on number of acres diverted. A large crop farm with more acres diverted would typically receive higher payments than a small farm."

Johnson continues: "Other program benefits, such as deficiency payments, are determined by the number of bushels or other units produced. This also gives the larger farm a potential advantage in payments received—at least until the limits on dollars of assistance are reached."

Large farms—those in the $500,000-and-up sales class—received around 15 percent of the total outlays (direct payments and net CCC loans) going to farms represented in the *1985 Farm Costs and Returns Survey.* These large farms make up about 2 percent of all U.S. farms. More than half of them received a payment or net CCC loan in 1985, and the recipients averaged $105,000 each.

"Our data confirm that the largest average payments are going to the largest farms," says Johnson's colleague, economist Dave Banker. "But you can look at it another way, too. The largest payments are going to the farms with the largest share of production."

He explains that these $500,000-and-up farms produce slightly more than 30 percent of U.S. agricultural output, based on their percentage of total crop and livestock sales. Their 15-percent share of government payments may seem disproportionately large relative to their numbers, yet that share is well below their 30-percent-plus contribution to the farm sector's total production.

The main reason that payments are so far below their share of production is that many farms in this large sales class don't produce the program commodities, so they aren't eligible for payments or CCC loans.

At the opposite end of the spectrum are the small, often part-time farms with sales below $40,000. They make up around 60 percent of all farms, but they provide less than 8 percent of agricultural production and they received just 5.4 percent of 1985 outlays. Many of these farms, too, don't qualify for the commodity programs, and the majority are operated by families who earn less income on the farm than off the farm.

According to Johnson and Banker, the sales classes receiving a disproportionately large share of payments, based on production, are more in the midsize farm category. Farms with 1985 sales of $100,000-$249,999, for instance, accounted for about 27 percent of U.S. production but received 38.1 percent of the government outlays. Farms with sales of $40,000-$99,999 contributed about 14 percent to the sector's production and received 19.8 percent of total outlays.

Although, in both cases, the average amount per farm was well below that received by those in the $500,000-plus sales class, the direct government payments, by themselves, tended to reduce the relative income gap between the midsize farms and the larger farms.

"In absolute terms, the average payment is much larger to the bigger farm, but the payment has a smaller relative effect on the larger farm's income than the payment going to midsize farms. As a result, these direct commodity program payments may help reduce the inequality in total household incomes across the different sales classes," Johnson says.

Distribution of Government Outlays by Sales Class[1]

	Percent of all farms	Percent of total crop and livestock sales	Percent of total outlays	Percent of farms receiving outlays	Average outlay per recipient
Sales Class					
$500,000 and up	2.1	31.3	14.7	56	$105,000
$250,000-$499,999	5.1	20.0	22.0	62	$58,000
$100,000-$249,999	14.6	26.7	38.1	66	$33,000
$40,000-$99,999	18.4	14.3	19.8	57	$15,000
Less than $40,000	59.8	7.7	5.4	18	$4,000

[1] Data from *1985 Farm Costs and Returns Survey.* Outlays include direct government commodity program payments and net CCC loans.

Agriculture's Financial Profile: A Look Behind the Aggregates

Some farmers can look back on 1986 as a good year. No doubt, they are outnumbered by those who've seen better.

Agricultural analysts, however, need more than a show of hands to measure the farm sector's financial performance. They need detailed farm-level data on receipts, expenses, cash flows, debt burdens, and other indicators. Many of the key indicators used to determine who fared reasonably well, and who didn't, in 1986 will be gathered over the next few months as USDA's annual ***Farm Costs and Returns Survey*** *is taken.*

Economists, meanwhile, are still analyzing results of the last costs-and-returns survey. It was taken in early 1986 and focused on financial conditions in the farm sector during 1985.

In the following article, economist Dave Banker of USDA's Economic Research Service reviews some of the major findings of that survey, how those findings are interpreted, and what they suggest in terms of U.S. agriculture's strengths and weaknesses. He begins by drawing briefly on data from other sources for an aggregate picture of the farm sector's income, debt, and asset position.

Many farmers entered 1986 under varying degrees of financial stress caused by large debt obligations, lower commodity prices, declining farmland values, and reduced farm exports. However, the overall financial performance of the farm sector during 1985 presented a mixed picture.

Net cash income (cash receipts plus government payments minus production expenses) rose to a record $44 billion, up from $39 billion in 1984. Major contributing factors included a $4-billion decrease in production expenses, large government payments, and a sharp increase in USDA crop loans. Taken together, government payments and loans amounted to $20 billion.

Total farm sector debt dropped by more than $7 billion—about 4 percent—between January 1, 1985, and January 1, 1986. Our survey data show substantial reductions in outstanding loans by all major farm sector lenders, with the exception of the Commodity Credit Corporation (CCC), which makes U.S. government-backed crop loans to farmers.

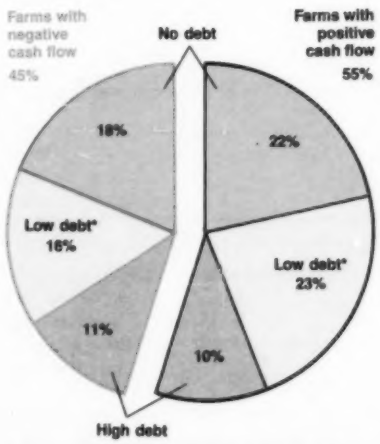
On the down side, farm real estate values declined by about 12 percent between early 1985 and early 1986. Asset values in the farm sector fell by nearly 10 percent during the same period. Farm sector equity (total assets minus debt) decreased by nearly 12 percent.

With assets declining faster than debt, total debt increased to 25 percent of total assets at the start of 1986, up from 23 percent a year earlier.

Preliminary estimates for 1986 suggest that debt continued to fall, as did the value of farm real estate. The drop in real estate values, however, was probably in the 8-10 percent range, compared with declines of 12 percent in each of the two previous years.

More Than Half the Farms Showed Positive Cash Flows, and 40% of Farms Carried No Debt, But 11% Had Both High Debts and Negative Cash Flows

Percent of all farms



* Low debt defined as debt-to-asset ratio of 40% or less. High debt defined as debt-to-asset ratio exceeding 40%.

Cash flow status on grain farms was strongly influenced by government payments and crop loans.

Who's Hurting, Who's Not

What do these broad measures, and their mixed signals, mean in terms of how widely financial stress, and financial strength, was distributed throughout the farm sector as 1986 began? This is where the costs-and-returns survey becomes particularly useful.

Two commonly used indicators of the financial status of a farm (or any other) business are its net cash flow and its debt-to-asset ratio.

Net farm household cash flow is computed by subtracting operating expenses, interest and principal payments on debt, and family living expenses from total cash income (farm and off-farm). To put it simply, farms with negative cash flows do not generate enough income to meet expenses.

A farm's debt-to-asset ratio is calculated by dividing the dollar value of its total debt by the dollar value of its assets. A farm whose debts amount to more than 40 percent of its assets cannot offset negative cash flows through further borrowing or sale of assets as easily as a farm with little or no debt.

A farm whose debt-to-asset ratio is over 100 percent is technically insolvent. Nearly 4 percent of the farms represented by the survey were technically insolvent at the end of 1985.

Farm businesses with high debt-to-asset ratios may remain viable by generating positive cash flows. Similarly, farms with low debt loads may be able to offset negative cash flows through additional borrowing, at least in the short term.

On the other hand, a farm with a negative cash flow and a debt-to-asset ratio greater

than 40 percent is caught in a double bind. It has neither the ability to cash flow its expenses nor the ability to borrow much more (if anything) against its assets to generate cash for operating and capital expenses.

Our survey indicated that 11.2 percent of farms were in this situation when 1986 began. An additional 10.1 percent of farms had debt-to-asset ratios greater than 40 percent, but with positive cash flows. These farms face potential problems in the future if their cash flows turn negative.

There is, of course, another side to the picture. Nearly 40 percent of the farms covered by the survey were completely debt-free on January 1, 1986. And eight farms out of every ten had debt-to-asset ratios of 40 percent or less. (Over three-fourths of the farms with no debt and about two-thirds of those with debt-to-asset ratios below 40 percent had 1985 sales of less than $40,000.)

The survey also showed some improvement among those farms with both negative cash flows and debt-to-asset ratios above 40 percent. These farms constituted a slightly smaller proportion of all farms—11.2 percent, down from 12.6—than they did in the previous year's survey. They also held a smaller share of the total farm debt—about 37 percent, down from 45 percent a year earlier.

The cash flow picture looked somewhat better, too. More than 55 percent of all farms had positive cash flows in 1985, compared with 49 percent the previous year.

Government payments and CCC crop loans played an important role in helping some farms achieve a positive cash flow. Survey data indicate that less than 50 percent of farms had a positive cash flow in 1985 before government payments and loans were included.

Behind the Aggregates

Farm financial characteristics vary widely by dollar volume of sales, type of farm, and region. Farms with annual sales of $100,000 or more made up 21.8 percent of U.S. farms but owed 67.5 percent of all farm debt. Farms in the $40,000-and-up sales classes had higher proportions of technically insolvent operations and higher average debt-to-asset ratios—but a lower incidence of negative cash flows—than smaller farms.

About the Survey . . .

Aggregate measures of financial conditions in the farm sector are very useful, but they don't tell us how widely problems are distributed and how conditions vary among different categories of farms. This is where USDA's annual *Farm Costs and Returns Survey* fits in.

The survey provides detailed whole-farm data on financial conditions, production expenses, capital purchases, and specific production practices. This allows the Economic Research Service to provide reliable information on financial and related characteristics of farms broken down by type of farm, region, sales class, and other categories. The survey is also used to develop "farm enterprise budgets," which are used in cost of production analysis.

The most recent survey was conducted in February and March of 1986. Usable responses were received from more than 11,000 farm operators representative of about 1.6 million U.S. farms. The official 1985 count shows 2.3 million U.S. farms, but the survey sample did not cover about 700,000 mostly small farms with sales of less than $10,000 a year.

The next survey will be conducted in February and March of 1987. Results will be analyzed and published by August 1987.

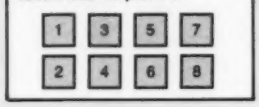
Cash grain, beef, hog, sheep, and dairy farms accounted for 76.2 percent of all farms and owed more than 80 percent of total debt. Of all farm types, cash grain farms had the highest proportion of farm debt, the highest average debt-to-asset

(continued on page 14)

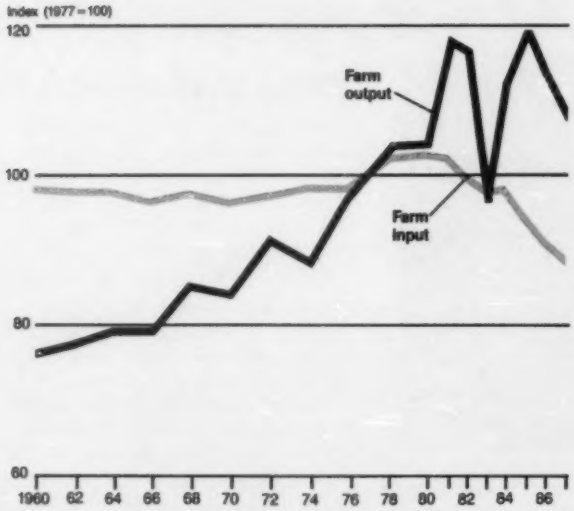
Charting the Outlook: Farm Sector Expenditures and Income

Chart material provided by economist Gary Lucier of the National Economics Division, Economic Research Service.

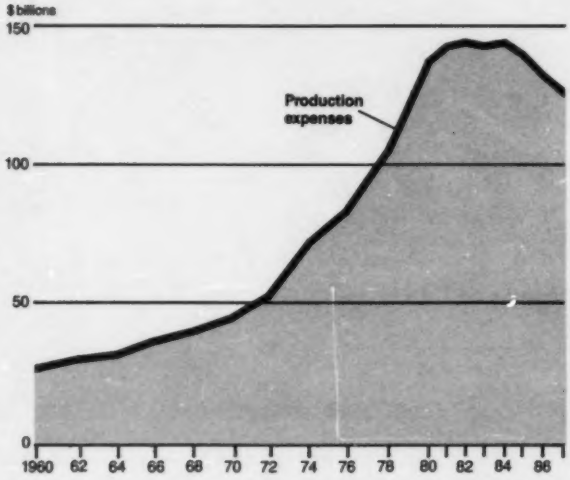
To read the charts in order, follow this sequence:



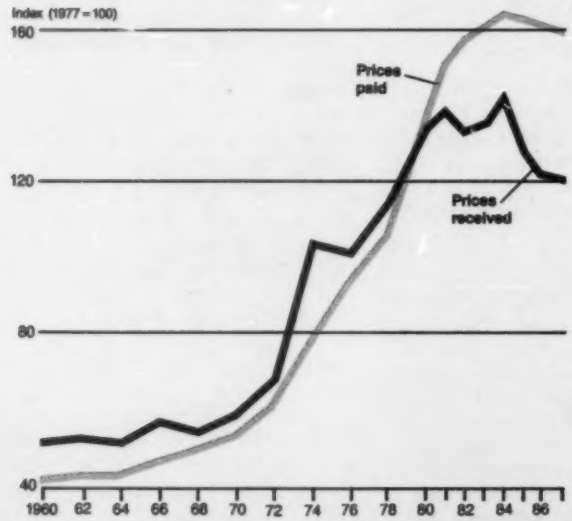
Although U.S. Farm Output Remains High, Farmers Are Cutting Back on Their Overall Input Use—A Trend that Began in 1979



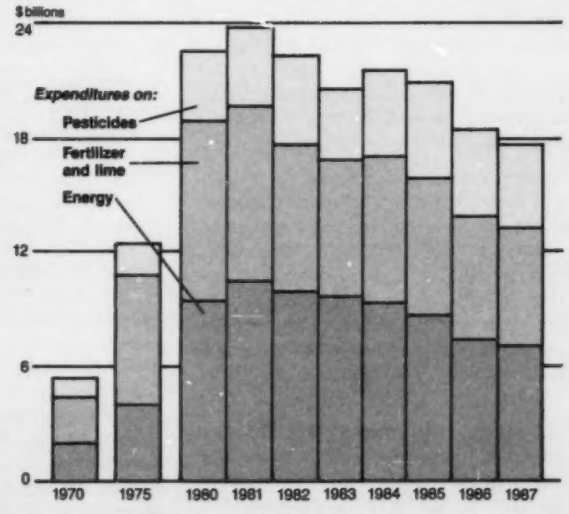
With Declining Input Use and Prices, Farmers' Production Expenditures Are Dropping, Too; Expenditures Fell an Estimated 9% from 1984 to 1986 and May Decline Around 3% in 1987 for the Largest Sustained Downturn Since 1929-33



Prices Received by Farmers May Drop Slightly in 1987, But Prices Paid—Which Had Been Rising Rapidly Since 1970—Are Expected To Decline for the Third Straight Year

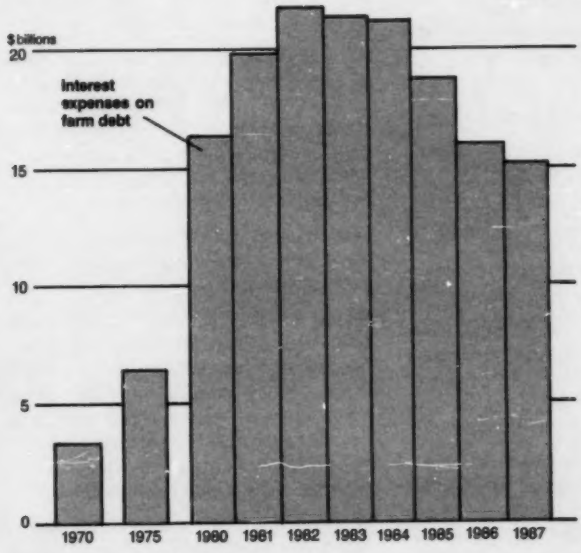


Spending on Manufactured Inputs Is Dropping Sharply; From 1981's High of Nearly $24 Billion, Total Expenditures May Slip Below $18 Billion This Year

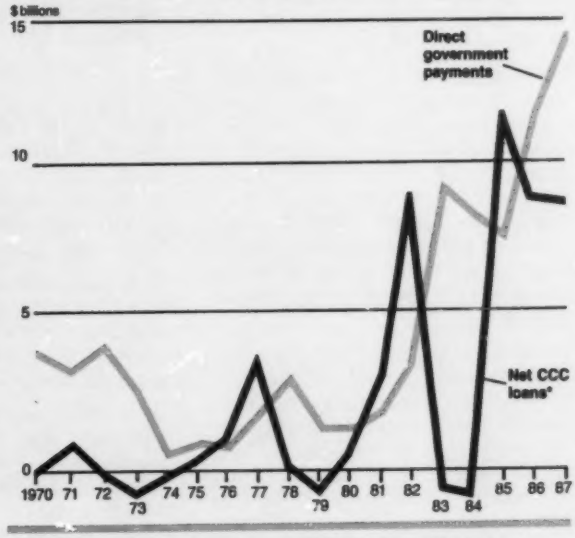


1986 estimated; 1987 projected.

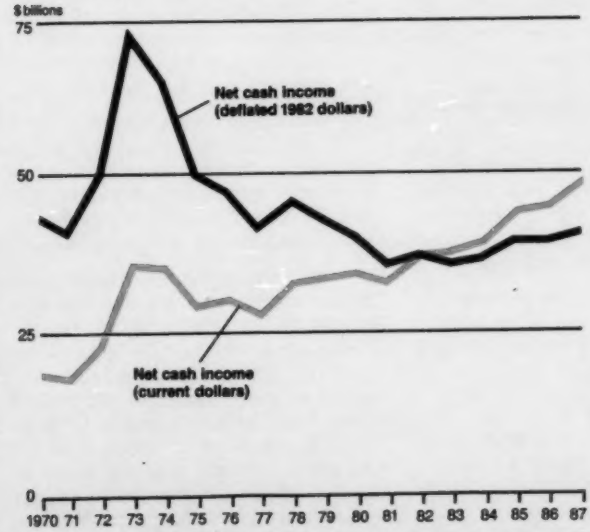
The Farm Sector's Interest Expenses Are Also Coming Down



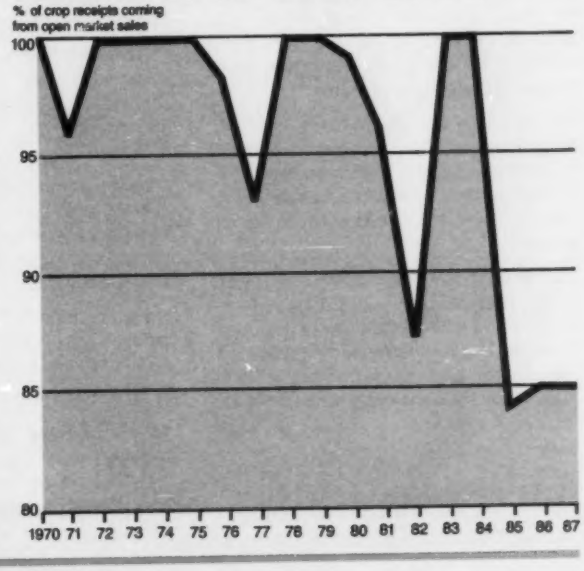
Farm Sector Receipts Are Being Propped Up by Large Government Payments; Direct Commodity Program Payments and Net CCC Loans Will Together Inject More Than $20 Billion into the Farm Economy in Both 1986 and 1987



Reduced Expenses Are Helping To Prop Up Net Cash Income, Although the Income Trend Looks Much Weaker After Adjustment for Inflation


$ billions
75
50
25
0
Net cash income (deflated 1982 dollars)
Net cash income (current dollars)
1970 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87

As the Government Role Increases, the Open Market Provides a Much Smaller Share of Farmers' Crop Receipts; This Share Is Likely To Remain Fairly Stable in 1987



1986 estimated; 1987 projected. * New loans minus loans repaid. Negative figure indicates loans repaid exceed new loans.

Why "Nontariff Barriers" Are a Major Farm Trade Issue

Under a medieval decree that still stands, West Germany won't allow sales of beer brewed with anything other than malt, hops, and water. Almost half a world away, Japan maintains strict quotas on the amount of beef and citrus products that can be imported.

These obstacles to expanded trade fit into a wide-ranging and widely used category labeled "nontariff barriers." They don't depend on tariffs or levies to raise the prices and artificially reduce the competitiveness of imported products. Instead, they use other methods, methods that are often more difficult to recognize—and the original motives behind these measures sometimes have little, if anything, to do with trade issues.

Whatever their purpose, however, the nontariff barriers can be every bit as effective as tariffs in denying or restricting access to markets. In fact, nontariff barriers to trade are probably more important than tariff barriers in overall levels of world agricultural protectionism, according to USDA analysts.

U.S. traders feel particularly hobbled by the hodgepodge of nontariff measures that effectively close some foreign markets to American agricultural products. That's because the United States exports a wide variety of farm products and has a large market share in many of them.

Such nontariff regulations range from the way a farm product is packaged and labeled to safety and sanitary requirements and the manner in which it must enter an importing country (the matter of import licensing, for example).

Hampered as the United States often is by nontariff measures, U.S. trade officials don't claim such rules are simply designed to restrict trade. But American officials did press to include an examination of nontariff rules in current world trade talks under the General Agreement on Tariffs and Trade (GATT).

On the GATT Agenda

The negotiations, which are being held in Geneva, Switzerland, are aimed at promoting freer trade among nations. Nations abiding by GATT rules now number more than 120 and account for four-fifths of world trade. Since GATT's founding in 1947, seven major rounds of trade talks have helped to lower tariffs and boost the level of trade among nations.

U.S. traders feel hobbled by the hodgepodge of nontariff measures that effectively close some markets to American farm products.

At the same time, however, nontariff barriers—such as West Germany's beer purity laws and Japan's import quotas—have grown to the point that they widely, if erratically, restrict much of the world's trade.

In preliminary talks at Punta del Este, Uruguay, GATT members agreed to work on reducing nontariff barriers. In this effort, they are expected to follow the recommendations of GATT's Committee on Trade in Agriculture (CTA), which were adopted by GATT Ministers in 1984, says economist Edward Wilson of USDA's Economic Research Service. Among the recommendations were two important principles:

- Quota restrictions on imports should be loosened or lifted completely. GATT rules should be bolstered and broadened to limit the imposition of quotas and other nontariff measures.

- Sanitary regulations and other technical barriers to trade, including related administrative requirements, should be modified as much as possible to minimize their adverse effects on agricultural trade.

The current GATT talks are scheduled to last for 4 years—and at least some analysts say it may take that long for a consensus to be reached.

Yet the Barriers Grow

Despite the 1984 CTA recommendations that nontariff barriers should be curbed, "the growing use by many countries of such measures on agricultural products has continued virtually unchecked," says economist Nicole Ballenger, also of USDA's Economic Research Service.

According to Ballenger, a major U.S. objective "is to bring farm trade more fully under effective GATT rules. To this end, the United States proposes eliminating quota restrictions on agricultural imports and reducing other barriers to market access in both developed and developing countries."

That would, of course, include the United States, which has quotas on dairy, meat, and sugar imports.

She adds that the United States also wants GATT rules that would trim the use of emergency import restraints, technical barriers to trade, import licensing, and state trading. (State trading refers to the practice of some nations to trade only through a government agency, rather than allowing private firms to export or make import purchases.)

Strengthening GATT rules in these areas, she says, means clarifying vague wording that has failed to restrain the use of nontariff barriers and that has hindered dispute resolutions. It also means revising the dispute settlement process to enable it to function more quickly and effectively, and eliminating some of the practices giving preferential trade treatment to developing countries because of balance-of-payments concerns and "infant industry" considerations.

"For agriculture," says Ballenger, "the GATT deliberations are crucial. Studies have indicated that existing levels of protection in agriculture have contributed to surplus production, low world commodity prices, and international price instability."

She says a freer trade arena could lead to a more promising future for American farm exports. At the same time, though, concessions offered by the United States under GATT negotiations could expose some sectors of American agriculture to increased competition from foreign exports. Changes would be phased in over several years, and reductions of nontariff barriers by most or all GATT members would lessen the costs of adjustment borne by producers here and abroad.

Case in Point: Japanese Import Quotas

Nontariff barriers to agricultural trade have been a source of friction between the United States and Japan for more than a decade.

One of the more prominent issues—at least in the public squabbles that have periodically surfaced since the late 1970's—is the quota placed by Japan on its beef and citrus imports. Discussions on beef and citrus are expected to resume this spring.

"Japan needs to protect its small-scale, high-cost agriculture from international competition," says economist William Coyle of USDA's Economic Research Service. "Japanese agricultural protection reflects the country's concerns over food security, food self-sufficiency, and preservation of an agricultural base. And these concerns are articulated by politically powerful interest groups."

The U.S. view, says Coyle, is that "Japan's import quotas on beef and citrus products are symbolic of a broader problem of Japanese protectionism."

Among industrialized nations, Japan has been one of the most restrictive of importers. Since 1974, Japan has maintained import quotas on 27 product categories, 19 of which are agricultural.

Moreover, Japan has a highly favorable trade balance with the United States that annually amounts to tens of billions of dollars—mostly in the form of cars, consumer electronics, and capital goods.

On the other hand, Japan has been one of our most stable overseas markets. It is, in fact, the largest single purchaser of American farm products—and has held that distinction for some 20 years. In fiscal 1986, Japan purchased about $5 billion worth of U.S. agricultural products.

"Nevertheless, the United States continues to voice objections to Japan's state trading practices, under which the government itself imports most major commodities," says Coyle, "and to the very slow pace of Japan's progress in reducing nontariff trade barriers."

Discussions have centered on beef and citrus because of growth in U.S. exports of these commodities to Japan in the last 10 years, and because these markets would potentially be more lucrative with further liberalization.

Following discussions with the United States, Japan announced in August 1984 that it would loosen the limits on imports of beef, fresh oranges, and orange juice through March 1988 and liberalize imports of grapefruit juice beginning in April 1986.

The expanded quotas are estimated to be worth $35-$40 million per year in U.S. farm exports to Japan through 1987. "But beef imports in 1987 will still be 40 to 70 percent below what they might be under free trade," says Coyle.

Beef and citrus talks are expected to resume this spring in order to reach a new understanding by the time the current one expires in March 1988.

Pressures to maintain nontariff barriers are very strong. Japan's quota on beef imports is designed to protect its small-scale livestock industry.

Difficult as these demands for freer, and fairer, trade may be, Ballenger notes, "GATT talks provide the world's most important forum for easing the tensions over farm trade that have plagued friendly relations between the United States and many of its trading partners and competitors during the last few years." □

[*Based largely on information provided by economists Nicole Ballenger and Edward Wilson of the International Economics Division, Economic Research Service.*]

Rice's Big Comeback: The Difference Is Price

U.S. rice exports, until recently hurt by high prices, are now enjoying a resurgence.

In sports, athletes who battle back from adverse conditions and perform well are sometimes given a "comeback player of the year" trophy. If agriculture offered a similar award, one of the strong contenders for "comeback commodity of the 1986/87 season" would be rice.

Price has made all the difference in the demand picture.

For the last four seasons, the U.S. rice situation has been characterized by relatively stagnant domestic demand, declining exports, and mounting stocks. At the end of the 1985/86 season (July 31, 1986), rice stocks hit a record high of 3.5 million tons, enough to supply more than a full year's worth of exports.

In the current season, by contrast, stocks may drop 15-20 percent as rice producers enjoy a resurgence both at home and in the export market.

According to Janet Livezey and Sara Schwartz, economists with USDA's Economic Research Service, lower prices—spurred primarily by the marketing provisions in the 1985 farm bill (Food Security Act)—have caused rice exports to climb and rice mills to operate at close to full capacity.

Preliminary estimates indicate that American rice exports increased to around 2.2 million processed tons in 1986, up from 1.9 million in 1985. Sales in 1987 are forecast to be around 2.6 million processed tons.

Livezey predicts that the lower rice prices could result in rising U.S. exports for the next several years, a far different scenario from the one at the beginning of 1986.

What's more, Livezey says, food processors are scrambling to introduce new rice products, and restaurants—helped by an increase in the U.S. population of Asians and Hispanics—are adding more rice dishes to their menus. Use of rice as an ingredient in cereals, frozen food products, and ethnic foods is also growing.

The turnaround is dramatic, but so was the price cut. Rice prices this season may average only about half the level of 2 years ago. And government payments to protect American producers' income will rise sharply. Payments may account for about 70 percent of the total income from U.S. rice production, up from 43 percent last season.

Sudden Turnaround

After peaking at about 3.2 million processed tons valued at $1.5 billion in 1981, American rice exports plunged. As the gap between the U.S. and the world price widened, many Asian, African, Middle Eastern, and European Community (EC) countries began buying lower priced rice, mainly from Thailand.

"The world price for rice was relatively stable in the 1960's, but very volatile in the 1970's when the United States expanded its acreage and production to meet rising world demand," Livezey explains. "Eventually, as our loan rates increased and the U.S. price rose above the world price, we began pricing ourselves out of the market."

The United States produces less than 2 percent of the world's rice, but has held about 15-25 percent of the export market. Since 1981, annual U.S. production has averaged about 4.5 million processed tons and exports about 2.6 million.

"Foreign countries like to buy U.S. rice when the price is right because American producers offer a reliable and high quality commodity that's not dependent on irregular monsoon rains—a condition that affects about 40 percent of the world's rice production," Schwartz says. "When U.S. prices began falling last summer, we started regaining some of our lost market share, especially in the Middle East, Latin America, and the EC."

According to Schwartz, the U.S. share of the world market is expected to increase to about 22 percent in 1986/87, up from around 18 percent in 1985/86.

Shifting Markets

Most of the world's rice production—projected to be about 320 million processed tons in 1986/87—is consumed within the country where it's grown. Livezey says that about 2 billion people worldwide depend on rice as their major food grain.

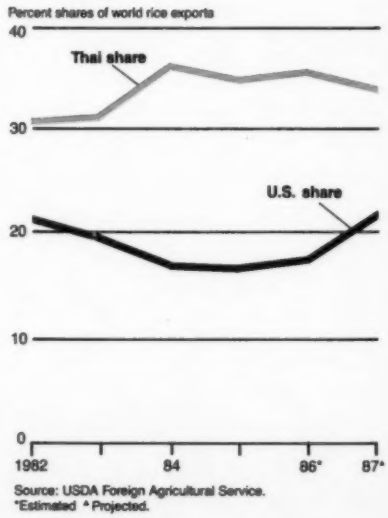
But only Thailand, the United States, Burma, Pakistan, and China are major exporters. Almost 90 percent of all rice is produced and consumed in Asia—a continent that until the 1970's was the main market for U.S. and world exports.

"When world income and population increased in the 1970's, many Asian nations began expanding their rice production. As a result, the export market shifted to Africa and the Middle East," Schwartz says.

She notes that exports to these regions increased from about 20 percent of the world market (1.6 million processed tons) in the 1970's to about 40 percent (5 million processed tons) by the early 1980's. At that time, however, world demand for rice imports started declining and the United States began losing sales to its number one competitor, Thailand.

"Thailand was able to expand its exports,

Thailand Remains the World's Largest Exporter, But the U.S. Share Is Recovering



Source: USDA Foreign Agricultural Service.
*Estimated *Projected.

Producers are continuing another trend that started in 1980: higher yielding seed varieties.

even though some countries still preferred U.S. rice," Schwartz says. "They were willing to try and accept similar grades of Thai rice because the quality was adequate and the price was lower."

U.S. rice exports to the EC, Saudi Arabia, Nigeria, South Africa, and North Yemen were especially hard hit, the economist says. In some markets—Nigeria, South Africa, and North Yemen—U.S. export levels declined 40-50 percent.

Number One Exporter

Thailand is the world's biggest rice exporter, accounting for 23-35 percent of total global trade. The country's annual exports have grown from about 2.7 million processed tons in 1980 to around 4.4 million in 1986.

Rice is central to Thailand's economy. It's grown on about half of the nation's farmland, and about 55 percent of Thailand's population of 40 million is engaged in rice production or the marketing of rice products. Last year, rice exports accounted for 12 percent of total export earnings.

But since 1985, rising stocks, weak world demand, and a series of currency devaluations have caused the value of Thai exports to decline sharply. After peaking at $270 per ton in 1984, the price of a ton of rice had declined to a low of $186 by April of 1986.

Despite the strong U.S. challenge, Thailand will remain a formidable force in the world rice market, predicts Schwartz.

"The United States has just begun making inroads into the Middle Eastern and African markets that switched to Thai rice in 1981. Moreover, Thailand continues to sell rice to former U.S. customers because its export price for many grades is still lower than the U.S. price," she says. "The gap is narrowing, but for price-conscious importing nations, it remains the most important factor."

Less Production, Higher Yields

At home, rice production declined about 6 percent to an estimated 4.1 million processed tons in 1986, down from a 1985 figure of around 4.4 million tons and a 1981 high of almost 6 million.

Rice producers will be getting more of their income from government sources over the next few years.

Harvested rice acreage also decreased from about 2.5 million acres in 1985 to about 2.3 million in 1986.

But achieving these reductions has not come without cost, and rice producers will be getting more of their income from government sources over the next several years, suggests Livezey. Producers are also expected to continue another trend they began at the start of the decade: using higher yielding seed varieties.

"Rice yields may average around 2.2 tons per acre this year, and improved management techniques and input use could boost that total another 400 to 600 pounds per acre by 1990," Livezey notes. "Since 1980, rice yields have increased substantially—in some cases almost half a ton per acre."

Growing Consumer Choice

Though U.S. farm prices for rice have declined 50 percent from around $7.90 per cwt in January to $3.82 per cwt in September, consumers will probably not see any immediate drop in price at the retail level or rush out to stock the pantry with additional bags of rice, predicts Livezey.

The average American consumes only about 12 pounds of rice a year, compared with 114 pounds of wheat flour and 49 pounds of fresh potatoes.

But the introduction of new products is giving consumers new ways to prepare and eat rice, and that is stimulating demand, she says.

"Rice is enjoying a surge in popularity, and it's becoming much more visible on grocery store shelves and menus," Livezey says. "There's been a lot of consumer incentive recently to 'try more rice, you'll like it.'"

The analyst notes that while many companies have put new products on the market, others are adopting a wait-and-see attitude. "There's a lot more competition waiting in the wings to introduce some more new rice products, particularly in the prepared side dish area," Livezey says. "But they're being cautious. They want to see what kind of products shoppers are going for."

Not all commercial rice processors are expanding production. Livezey points out that beer brewers—in the past, one of the fastest growing markets for domestic rice sales—are using less rice. The reason: Americans are cutting back on beer consumption.

So how do rice producers and millers see the near future shaping up? According to Tom Slayton, director of marketing services for the Rice Millers' Association, the mood is both cautious and optimistic. "The industry feeling is that we've come a long way toward getting back on our feet, but there are still some variables—like possible lawmaker changes to the farm bill or wildly fluctuating world production—that have to be considered before the U.S. rice export market is fully reestablished," Slayton says.

Still, the marketing provisions of the farm bill and increased participation in USDA acreage reduction programs have worked well to improve this year's supply-demand outlook, Livezey and Schwartz contend. "The flexibility provided by the current rice program has reduced stocks, cut production, and made us more competitive in the world market," say the analysts. □

[*Based on information supplied by economists Janet Livezey of the National Economics Division and Sara Schwartz of the International Economics Division, Economic Research Service.*]

Agriculture's Financial Profile

(continued from page 7)

ratio, and the next-to-highest proportion of technically insolvent farms. Yet they also had the third lowest proportion of farms with negative cash flows.

Cash flow status on cash grain farms was strongly influenced by government payments and crop loans. Of all cash grain farms, 38 percent had negative cash flows, compared with nearly 56 percent that would show negative cash flows without government payments and loans.

Looking at financial conditions by regions, the ten states in and around the Corn Belt held 43.5 percent of all farms but owed 53.9 percent of all debt. They had the highest average debt-to-asset ratios and the highest proportions of technically insolvent farms.

Of the farm operator debt reported in our last survey, 72.5 percent was held by four categories of lenders. Commercial banks held 27.4 percent of the total, federal land banks held 22.2 percent, the Farmers Home Administration held 15.1 percent, and production credit associations held 7.8 percent.

When the figures are in, the key financial indicators for 1986 are unlikely to show any dramatic shifts from 1985.

Not just farmers, but lenders, too, are sometimes jeopardized by the troubled financial conditions in agriculture.

More than 84 percent of the farm debt held by FmHA was owed by farms with debt-to-asset ratios above 40 percent. More than a third of FmHA debt was owed by technically insolvent farms.

Not Much Change

When the figures are in, the key financial indicators for 1986 are unlikely to show any dramatic shifts from 1985.

Net cash income was probably about the same, as a further decline in production expenses and an increase in government payments offset an estimated drop in cash receipts. Land values declined perhaps another 8-10 percent. Farm sector indebtedness almost certainly dropped again, but by less than asset values, leading to some additional loss in farm equity.

Although overall farm sector income is continuing at a relatively high level, a substantial share of that income is coming from government payments and loans. Many of the farms recording positive cash flows would be on the negative side of the ledger were it not for the payments and CCC crop loans.

Moreover, even with the large payments, a significant number of farms are still experiencing financial stress caused by high debt loads and negative cash flows. Lenders carrying the debt of these operations in their loan portfolios face large potential losses as well.

From all available indicators, some of the adjustments in farm sector debt, land values, and production expenses that are necessary for recovery are continuing to take place. However, as 1987 begins, problems remain in the farm sector's financial profile. Clear evidence of a solid recovery has yet to appear. □

[*Written by economist David Banker of the National Economics Division, Economic Research Service.*]

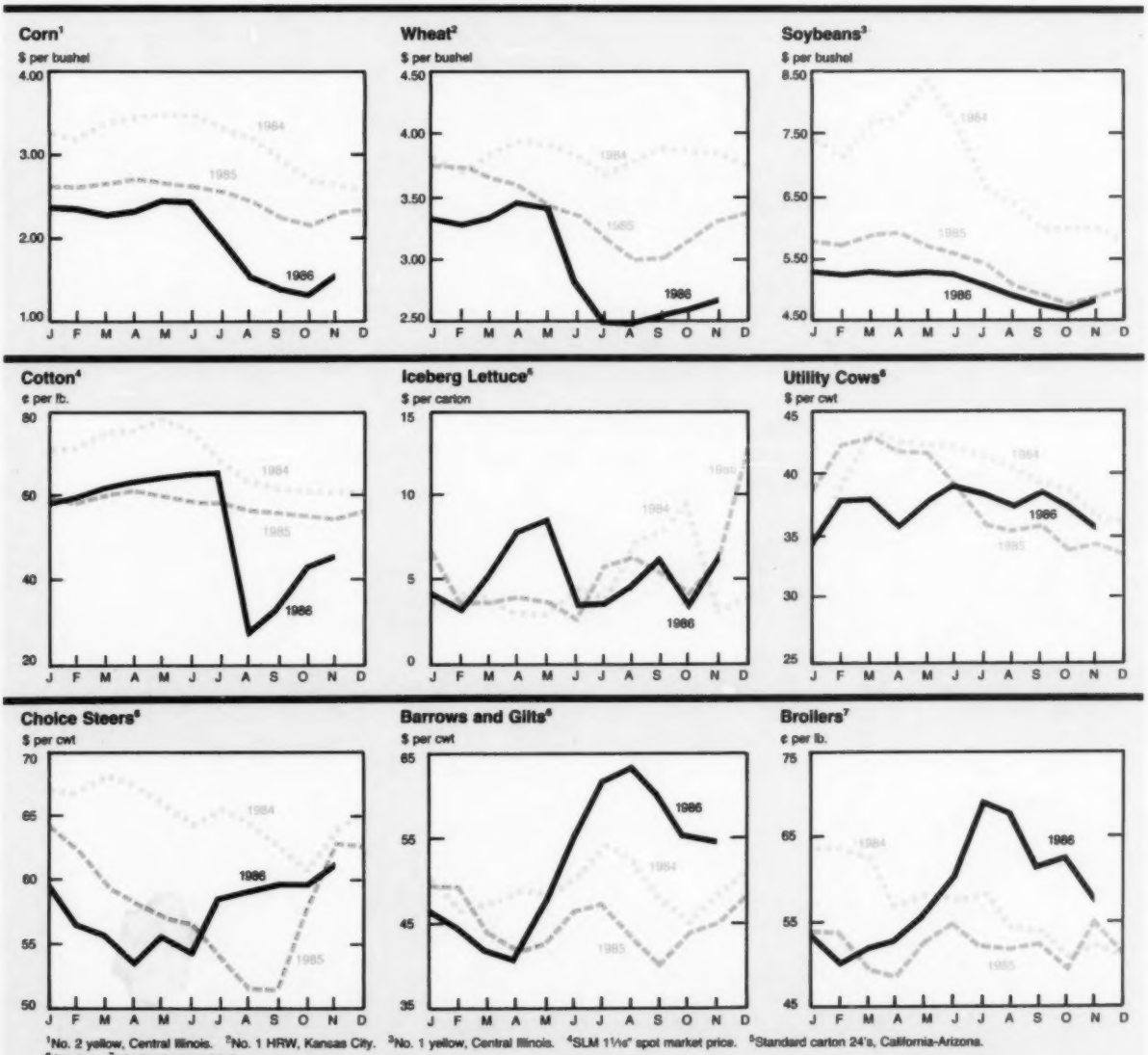
Measures of Financial Stress Vary Widely Among Different Types of Farms[1]

	Percent of all U.S. farms	Percent of all farm debt	Average debt-asset ratio[2]	Percent of farms showing:			
				Negative cash flows	High debts[3]	High debts and neg. cash flows	Technical insolvency[4]
Crop farms							
Cash grain	25.7	37.3	31.0	37.9	29.1	13.3	6.5
Tobacco, cotton	6.0	4.2	24.0	53.3	18.0	10.5	2.5
Vegetable, fruit, and nut	4.3	5.4	20.0	42.0	16.7	9.8	3.0
Nursery and greenhouse	1.5	1.0	16.0	20.6	16.4	2.1	6.7
Other crop	4.9	4.8	24.0	46.6	21.4	10.5	5.2
Meat and poultry farms							
Beef, hog, and sheep	39.1	26.5	16.0	48.2	15.2	8.5	3.0
Dairy	11.3	16.7	27.0	45.3	32.8	20.3	3.7
Poultry	2.1	1.6	24.0	29.4	22.2	8.0	1.4
Other livestock	5.1	2.5	10.0	52.8	12.6	7.8	0.4
All farms	100.0	100.0	22.0	44.7	21.3	11.2	4.0

[1] Based on *1985 Farm Costs and Returns Survey.* [2] Expressed as a percent. [3] Farms with a debt-to-asset ratio greater than 40%. [4] Farms with debts exceeding assets.

Monthly Price Monitor

USDA's November 1986 index of farm prices increased 3.3% from October but was 1.6% below its year-earlier level. Corn prices rose 22¢ to $1.55 per bushel, the highest since July. Wheat, at $2.68, was the highest since June. Soybeans gained 21¢ to $4.88, and cotton moved up to 45.8¢ a pound, the third straight monthly increase since July's 26.8¢ low. Lettuce jumped back above $6 per carton. Except for choice steers, meat animal prices turned down. While choice steers rose to $61.51 per cwt, the highest since December 1985, utility cows dropped to $35.91, the lowest since April. For the first time in 6 months, barrows and gilts slipped below $55 per cwt and broilers below 60¢ per pound. All prices shown are monthly averages.



[1]No. 2 yellow, Central Illinois. [2]No. 1 HRW, Kansas City. [3]No. 1 yellow, Central Illinois. [4]SLM 1⅛" spot market price. [5]Standard carton 24's, California-Arizona. [6]Omaha. [7]Wholesale, New York.

United States
Department of Agriculture

Economic Research Service
1301 New York Avenue, N.W.
Washington, D.C. 20005-4788

OFFICIAL BUSINESS
Penalty for Private Use, $300

BULK RATE
POSTAGE & FEES PAID
U.S. Dept. of Agriculture
Permit No. G-145

To stop mailing ☐ or to change your address ☐ send mailing label on this magazine and new address to *FARMLINE*, Rm. 228, 1301 New York Avenue N.W., USDA, Washington, D.C. 20005-4788.

```
FRMLNSERIA300SIISSDUE004R    1 **
SERIALS PROCESSING             **
UNIV MICROFILMS INTL           **
300 N ZEEB RD                  **
ANN ARBOR      MI   48106      **
```

Outlook '87 Charts

You can have a published copy of the charts presented at USDA's 63rd Agricultural Outlook Conference held in Washington, D.C., December 1986.

This special publication will carry the approximately 150 charts used by ERS Conference speakers. Each chart, measuring 4½ by 5½ inches, will be printed in black and white for easy reproduction or use on overhead transparencies.

To Order **Outlook '87 Charts**
Send a check or money order for $2.75 domestic ($3.50 foreign) to:

Outlook '87 Charts
EMS/USDA, Room 228
1301 New York Ave., N.W.
Washington, D.C. 20005-4789

Number of copies ordered _____

Enclosed is my check or money order for $_____ made payable to EMS/USDA

Please print or type

(Outlook '87 Charts will be sent to you by return mail.)

Name

Company or organization

Street Address or P.O. Box No.

City State Zip code

For more information, call: (202) 786-1494